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The Use of Puzzle Media in BIPA Learning to Improve the Language Skills of Foreign Learners at Matthayom 2 Sangprathif Wittaya School, Thailand: Classroom Action Research

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A B S T R A C T

This study aims to improve the language ability of foreign learners through the use of puzzle media in BIPA learning in Matthayom 2 class at Sangprathif Wittaya School, Thailand. In this study, the language ability referred to in the title refer to the reading skill component. The research method used is Classroom Action Research (CAR) which was implemented in two cycles through the stages of planning, action, observation, and reflection. The research subjects consisted of 15 BIPA learners, with data collected through tests, observation, and documentation. The results of the study showed a significant increase in reading skills, especially in the aspects of word recognition accuracy, understanding of meaning, and spelling and sound relationships. The average score increased from 60 (pre-action) to 74 (cycle I) and 87 (cycle II). The percentage of learners with the very good category increased from 0% in the pre-action to 20% in cycle I and 33% in cycle II. Puzzle media is pedagogically relevant in BIPA learning because the activity of arranging and matching letters and images helps learners connect written forms with sounds and meanings contextually, thereby improving the ability to recognize words and understand reading. Thus, the use of puzzle media has proven effective in improving the language ability of foreign learners in BIPA learning, especially in the aspect of reading skills.

Keywords: *BIPA, Puzzle Media, Language Ability, Reading Skills, Foreign Learners*.

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INTRODUCTION

Indonesian is increasingly developing internationally through the Indonesian Language for Foreign Speakers (BIPA) program as a means of cultural diplomacy. BIPA has expanded to Southeast Asia, including Thailand. (Tawandorloh et al., 2021) This program has been implemented at several major universities, such as Fatoni University, since 2016. It offers institutional support, a curriculum, teaching staff, and structured learning methods, covering the four main language skills: listening, speaking, reading, and writing.

However, at the secondary school level in Thailand, BIPA instruction remains limited, resulting in students' reading skills tending to be low. This aligns with findings (Srikandi, 2022) that show that most Thai students experience difficulty recognizing and distinguishing Indonesian phonemes. These phonological difficulties not only affect pronunciation but also slow down comprehension of words and meaning when reading.

In BIPA learning, reading skills play a crucial role because through reading, learners have the opportunity to learn new words, master vocabulary, and better grasp sentence structure (Utami & Khaerunnisa, 2024). Furthermore, reading is one of the four primary language skills that BIPA learners must master, along with listening, speaking, and writing (Puspita et al., 2021). Therefore, reading skills are a crucial foundation in the language

acquisition process and determine the success of foreign learners in understanding and using Indonesian effectively.

To better understand the root of the reading difficulties experienced by learners, it is important to examine the nature of reading itself. According to (Hodgson, 1960 in Tarigan, 2021) reading is a process used by readers to obtain the message the author intends to convey through written language. This process requires that the meaning of a group of words forming a unit be understood quickly and accurately; otherwise, the explicit or implicit message will not be properly grasped. Therefore, the low reading skills of foreign learners indicate a barrier in the process of understanding words, sounds, and meaning.

The reading difficulties explained theoretically above align with the findings of previous research in Southern Thailand (Tawandorloh et al., 2021) which found that many learners in Southern Thailand struggle to distinguish between the spelling, pronunciation, and meaning of Malay and Indonesian. This difference often leads learners to misinterpret words that are similar in form but have different meanings. This directly impacts reading skills because inaccurate word recognition affects comprehension of the content of the reading.

(Ilham et al., 2025) also emphasized that the difficulties foreign learners face in mastering Indonesian are influenced by two main factors: internal factors, such as differences in language structure and comprehension systems, and external factors, such as a limited learning environment and support. Therefore, BIPA teachers need to develop innovative, interactive, and contextual learning strategies so that learners can understand Indonesian through enjoyable and meaningful learning experiences.

Media selection is a crucial aspect in improving the quality of learning. The use of appropriate media can increase student engagement in the learning process and help them understand the material more effectively (Auliya & Syamsuyurnita, 2025). Furthermore, (Sari et al., 2024) emphasized that learning media encompasses a variety of tools and materials, from books, teaching aids, digital interactive media, audiovisuals, videos, animations, to interactive learning platforms. This diversity of media provides teachers with the opportunity to adapt teaching strategies to the characteristics of their students.

Among the various types of media available, puzzle is an attractive alternative for improving reading skills. As a form of game-based learning, puzzles can create an active, enjoyable, and meaningful learning environment. (Manik & Febriyana, 2024) demonstrated that the use of puzzle in learning significantly improved student learning outcomes, from 58.3% in cycle I to 83.3% in cycle II. This medium helps students understand concepts through activities such as arranging, matching, and finding patterns, thus facilitating critical thinking and natural word recognition.

Other research also supports the effectiveness of this medium (Arlina et al., 2023) finding that letter puzzle effectively develop early childhood reading skills, particularly in letter recognition, word formation, and understanding the relationship between sound and writing. Similarly, research (Fatika, 2025) shows that the use of letter puzzle significantly improves students, reading interest and learning outcomes, with average scores increasing from 61.64% to 89.61%, teacher activity reaching 100%, and student response reaching 83%.

(Fauzi et al., 2025) also shows that the use of puzzle positively impacts student participation and motivation. Puzzle encourage collaboration, problem-solving, and social interaction, creating a more lively, inclusive, and enjoyable learning environment compared to conventional methods.

(Narakundi & Susanto, 2025) demonstrated that the application of puzzle in the Problem-Based Learning model significantly improved students' reading aloud abilities, with average scores increasing from 63 to over 85, and learning completion reaching 95-100%. This medium also increased student activity, concentration, and engagement during learning.

Similar findings were also reported by (Nurlatifah et al., 2025) who demonstrated that the use of letter puzzle had a positive impact on improving children's early reading abilities, as demonstrated by significant changes in ability after learning.

Numerous studies have shown that puzzle is not only effective in elementary education but also have the potential to be applied in Indonesian Language and Literature (BIPA) learning. Through the activity of arranging letters and matching images with their meanings, foreign learners can recognize the forms and sounds of the Indonesian language contextually while simultaneously improving their reading skills.

Based on this, this study aims to improve students' reading skills through the use of puzzle media in class Matthayom 2 at Sangprathif Wittaya School, Thailand. The research used the Classroom Action Research (CAR) method with two cycles, including planning, action, observation, and reflection. The results are expected to contribute to the development of more creative and effective learning media in teaching BIPA, particularly for reading skills.

METHOD

This research uses the Classroom Action Research (PTK) method which aims to improve the reading skills of foreign students through puzzle media in BIPA learning at the Sangprathif Wittaya School, Thailand. The research subjects consisted of 15 BIPA class Matthayom 2 students aged between 13-14 years. All students are Thai citizens and use Thai as their first language in everyday life. Their level of Indonesian language proficiency is at the basic level (A1), which is characterized by very limited ability to recognize letters and vocabulary, as well as difficulties in understanding the relationship between spelling, sounds and meaning of words.

The research was conducted in two cycles, each encompassing planning, action, observation, and reflection. Prior to the action, a pre-test was administered to assess initial reading skills, particularly in word recognition, spelling, and word meaning. In cycle I, learning focused on arranging letters into simple words using letter puzzles in groups. In cycle II, activities were conducted in groups and focused on matching images with words so that learners could contextually integrate written forms with meanings.

The learning material, "Letter and Word Recognition," was adapted from BIPA Module 1: My Indonesian Friend (Nastiti, 2019). Cycle I emphasized letter and word recognition, while Cycle II developed Indonesian vocabulary appropriate to the basic BIPA learner's ability level.

Research data was collected through tests, observations, and documentation. Tests were used to measure reading skills, observations recorded learning activities, and documentation strengthened the validity of the data.

Assessment criteria referred to reading aspects (Tarigan, 2021) which include word recognition, spelling and sound relationships, and understanding meaning. Data analysis was conducted quantitatively and qualitatively. Quantitative data were obtained from pre-action scores, Cycle I, and Cycle II, which were analyzed using averages and percentage improvement in learning outcomes. Qualitative data were analyzed descriptively based on observations and teacher reflections. The grade categories were adapted from (Ramadhani & Febriyana, 2025): Very Good (93-100), Good (84-92), Sufficient (75-83), and Poor (<75).

FINDINGS AND DISCUSSION

Findings

This section presents the results of research on improving the reading skills of BIPA students in class Matthayom 2 at Sangprathif Wittaya School through the use of puzzle media. The learning materials used in this study focused on "Letter and Word Recognition", which was adapted to the abilities of elementary level students. The results of the research on improving reading skills through puzzle media in BIPA students in class Matthayom 2 at Sangprathif Wittaya School are explained in full based on pre-action activities, cycle I, and cycle II in the following description.

Pre-action

Based on the results of the pre-action before using puzzle media in BIPA learning, it was found that the language skills, especially the reading skills of foreign students in class

Matthayom 2 at Sangprathif Wittaya School, were still relatively low. The detailed results of the evaluation of learning activities in the pre-action stage are presented in Table 1

Table 1. Pre-Action Test Results

No	Student Name	Word Recognition Accuracy	Understanding Meaning	The Relationship between Spelling and Sound	Score	Value
				Assessment criteria		
1	P1	3	2	4	9	75
2	P2	3	3	4	10	83,3
3	P3	3	2	3	8	66,7
4	P4	3	2	2	7	58,3
5	P5	3	3	4	10	83,3
6	P6	3	2	3	8	66,7
7	P7	2	1	2	5	41,7
8	P8	2	1	2	5	41,7
9	P9	3	1	3	7	58,3
10	P10	3	1	2	6	50
11	P11	3	1	3	7	58,3
12	P12	3	1	1	5	41,7
13	P13	3	2	3	8	66,7
14	P14	3	3	3	9	75
15	P15	2	1	1	4	33,3
	Amount					900
	Average					60

Table 2. Assessment Frequency

Category	Interval Value	Frequency (f)	Percentage (%)
Very good	93-100	0	0%
Good	84-92	0	0%
Enough	75-83	4	26%
Not enough	<75	11	73%

Cycle 1

In cycle I, learning activities on letter and word recognition were carried out using puzzles in groups in the Matthayom 2 class at Sangprathif Wittaya School. This cycle aimed to improve language skills, particularly reading skills. Test results showed an increase in learner abilities compared to the pre-action phase, although not yet reaching optimal results. Details of the reading skills evaluation results are presented in Table 3.

Table 3. Pre-Action Test Results

No	Student Name	Word Recognition Accuracy	Understanding Meaning	The Relationship between Spelling and Sound	Score	Value
				Assessment criteria		
1	P1	4	3	4	11	91.7
2	P2	4	4	4	12	100
3	P3	3	2	4	9	75
4	P4	3	2	4	9	75
5	P5	4	4	4	12	100
6	P6	4	2	3	9	75
7	P7	3	2	2	7	58,3
8	P8	2	2	2	6	50
9	P9	3	2	3	8	66,7
10	P10	3	2	2	7	58,3
11	P11	3	2	3	8	66,7
12	P12	3	2	3	8	66,7
13	P13	4	2	4	10	83,3
14	P14	4	4	4	12	100
15	P15	2	1	2	5	41,7
	Amount					1.108,4
	Average					74

Table 4. Assessment Frequency

Category	Interval Value	Frequency (f)	Percentage (%)
Very good	93-100	3	20%

Good	84-92	1	6%
Enough	75-83	4	26%
Not enough	<75	7	46%

Cycle 2

In cycle II, learning focused on developing comprehension using puzzles. Test results showed significant improvements in reading skills, particularly in word recognition, understanding meaning, and spelling-sound relationships. Details of the evaluation results are presented in Table 5.

Table 5. Pre-Action Test Results

No	Student Name	Word Recognition Accuracy	Understanding Meaning	The Relationship between Spelling and Sound	Score	Value
		Assessment criteria				
1	P1	4	4	4	12	100
2	P2	4	4	4	12	100
3	P3	4	3	4	11	91,7
4	P4	4	3	4	11	91,7
5	P5	4	4	4	12	100
6	P6	4	4	4	12	100
7	P7	3	2	4	9	75
8	P8	3	2	3	8	66,7
9	P9	3	3	4	10	83,3
10	P10	3	3	3	9	75
11	P11	4	3	3	10	83,3
12	P12	3	3	4	10	83,3
13	P13	4	3	4	11	91,7
14	P14	4	4	4	12	100
15	P15	3	2	3	8	66,7
		Amount				1.308,4
		Average				87

Table 6. Assessment Frequency

Category	Interval Value	Frequency (f)	Percentage (%)
Very good	93-100	5	33%
Good	84-92	3	20%
Enough	75-83	5	33%
Not enough	<75	2	13%

Discussion

Based on the pre-action results, the reading skills of BIPA students in Matthayom 2 class are still in the low category. Eleven out of 15 students (73%) scored below the Minimum Competency (KKM) of 75, and only four students (26%) achieved the sufficient category. None were in the good or very good category. This condition indicates that students still have difficulty recognizing words, understanding meaning, and connecting spelling with sounds. This finding is in line with (Tarigan, 2021) that reading requires the ability to recognize words, understand meaning, and letter-sound relationships. The average score of 60 confirms that the basic prerequisites for reading have not been met, so corrective action is needed through more interactive and contextual learning media, namely puzzle media in cycle I.

In cycle I, learning was carried out in groups, but assessments were still carried out individually to monitor the progress of each student. The results of the reading skills test showed an improvement compared to the pre-action, with 7 students (46%) in the poor category, 4 students (26%) in the sufficient category, 1 student (6%) in the good category, and 3 students (20%) in the very good category. Observation results showed that some students still lacked focus because the puzzle media was not sufficiently engaging. As a result, they still experienced difficulties in recognizing words, understanding meaning, and connecting spelling with sounds.

This situation demonstrates the need for media improvements to make them more engaging, contextual, and interactive, thereby increasing learner motivation and focus. In line with the opinion of (Shabrina et al., 2025) appropriate learning media can enhance the effectiveness of material representation and encourage learning motivation. Therefore,

improvements to the puzzle media in cycle II are expected to increase participation and optimize learning outcomes.

Improvements in reading ability were clearly evident in cycle II. Modifying the puzzle media with images helped learners interpret written forms with contextual meaning, resulting in a more effective learning process. At this stage, learners were divided into four groups, but individual assessments were still conducted to monitor the development of each learner's abilities. The assessment results showed that 2 learners (13%) received a score of "poor," 5 learners (33%) received a score of "sufficient," 3 learners (20%) received a score of "good," and 5 learners (33%) received a score of "very good." These improvements are supported by the opinion of (Jauza & Albina, 2025) who stated that appropriate learning media can encourage students to be more active and creative. Furthermore, observations showed increased focus, enthusiasm, and activeness among students during the learning process. Most students were able to recognize words, understand their meaning, and correctly connect spelling and sound. Because the success indicators had been achieved, cycle II was deemed successful, and no further action was required.

CONCLUSIONS

Based on the observations, the use of puzzles proved effective in improving the reading skills of BIPA students in class Matthayom 2 at Sangprathif Wittaya School, Thailand. The effectiveness is seen from the increase in the average score, namely 60 in the pre-action (poor category), 74 in cycle I (poor category), and 87 in cycle II (good category). The percentage of students with the very good category also increased from 0% to 20% in cycle I and 33% in cycle II. Modification of picture puzzles in cycle II increased students' motivation and understanding in recognizing words, meanings, and spelling. This media also developed concentration and critical thinking skills, thus helping to achieve the KKM. The data proves that the use of puzzle media not only improves vocabulary mastery and spelling-sound relationships, but also significantly accelerates students' learning progress until they reach completion in cycle II. Thus, puzzle media is effective as a BIPA learning tool to improve the reading skills of foreign students.

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